



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,587	02/15/2005	Pedro Serna	088245-0191	6554
23524 7590 03/04/2010 FOLEY & LARDNER LLP 150 EAST GILMAN STREET P.O. BOX 1497 MADISON, WI 53701-1497				
EXAMINER				
TRAN, PABLO N				
ART UNIT		PAPER NUMBER		
2618				
MAIL DATE		DELIVERY MODE		
03/04/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/524,587

**Applicant(s)**

SERNA ET AL.

**Examiner**

Pablo N. Tran

**Art Unit**

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 11-14 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 15, and 17-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-10, 15, and 17-21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 1 and 15, new subject matter, “wherein the data packet includes a unicast destination address corresponding to a mobile node; wherein the link-layer frame includes a broadcast address and the unicast destination address” and “wherein the broadcast address is configured such that each of the plurality of access devices does not have to join the broadcast address in order to process the link-layer frame.”, was not disclosed in the specification, as originally filed. Claims 2-10 are dependent claims.

Regarding claim 7, new subject matter, “the unicast destination address is a network layer address”, was not disclosed in the specification, as originally filed.

Regarding claim 17, new subject matter, "An article of manufacture including a computer-readable medium having instructions stored thereon that, If executed by a computing device, cause the computing device to perform operations comprising", was not disclosed in the specification, as originally filed. Claims 18-21 are dependent claims.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-6, 8-9, and 15 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant Admitted Prior Art (hereinafter "AAPA").

As per claims 1 and 15, AAPA disclosed a method of forwarding a data packet wherein receiving the data packet wherein the data packet includes a destination address (fig. 4/no. 61), generating a link-layer frame includes a broadcast address (fig. 4/no. 61) and the link-layer destination address (fig. 4/no. 71) of the mobile node, and sending via the broadcast address the link-layer frame to a plurality of access devices wherein at least one access device supports the mobile node (fig. 4, paragraph 0002-0009).

As per claim 2, AAPA disclosed wherein said broadcast address is predefined (paragraph 0002-0009).

As per claim 3, AAPA disclosed determining that the at least one access device supports the mobile node and forwarding the link-layer frame to the mobile node (paragraph 0002-0009).

As per claim 4, AAPA disclosed wherein said data packet is an IP data Packet (paragraph 0002-0009).

As per claim 5, AAPA disclosed wherein said broadcast address is a link-layer address (paragraph 0002-0009).

As per claim 6, AAPA disclosed wherein said plurality of access devices store mappings between supported destination addresses and link-layer addresses corresponding to the supported destination address (fig. 4, paragraph 0002-0009).

As per claim 8, AAPA disclosed wherein the data packet further comprises a payload and the payload is included in the link-layer frame (fig. 4, paragraph 0002-00092).

As per claim 9, AAPA disclosed of encapsulating said data packet into a link-layer frame (fig. 4, paragraph 0002-0009).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (hereinafter "AAPA") and in view of Choyi et al. (US Pat No 7,339,928).

As per claim 10, AAPA is silent about discarding the packet if the access device does not support the mobile node. However, Choyi disclose such teaching (col. 14/ln. 49-col. 15/ln. 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention for AAPA to utilize such teaching, as taught by Choyi, in order to save bandwidth.

### ***Response to Arguments***

7. Applicant's arguments filed 12/01/09 have been fully considered but they are not persuasive.

In response to the Applicant's arguments regarding the 112 1<sup>st</sup> paragraph rejection, the examiner has thoroughly reviewed the specification (especially paragraph 0037-0038 and 0041, as cited by the Applicant), and has found no conclusive evidence supporting the claimed limitations, "wherein the link-layer frame includes a broadcast address and the unicast destination address" and " the unicast destination address is a network layer address". Therefore, the rejection is proper.

The Applicant state that, "AAPA does not disclose sending via the broadcast address the link-layer frame to a plurality of access devices wherein at least one access device supports the mobile node. In response to the Applicant's argument, AAPA disclose such limitation of sending the link-layer frame (fig. 4/no. 70) via the broadcast

address (fig. 4/no. 71) and wherein the packet is sent to the support access devices (see fig. 4, paragraph 0002-0009). Therefore, the rejection is proper.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898. The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-directauspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 1, 2010

/Pablo N Tran/

Primary Examiner, Art Unit 2618